# SWAYAM YADAV

#### **EDUCATION**

Kalinga Institute of Industrial Technology, Bhubaneswar, India

October 2021 - Present

Bachelor of Technology in Computer Science & Engineering

October 2018 - April 2020

St. Joseph College, Bhalwari, Nepal

Senior Secondary School (12th)

Percentage: 77.5%

CGPA: 6.79

SKILLS

**Programming Languages:** Python, C/C++

Cybersecurity Tools: SIEM Tools, OSINT Tools, Reconnaissance Tools, Kali Linux

Security Knowledge: Cryptography, Threat Management, Incident Response, Security Frameworks and Control

Technologies: OpenCV, MediaPipe, Scikit-learn, Matplotlib

Academic Background: Data Analytics, Internet of things, Data Structures and Algorithms, Object Oriented

Programming, Database Management System

## **CERTIFICATIONS**

Python for Everybody Specialization (Coursera) Jan 2024 - Mar 2024 Google Cybersecurity Professional Certificate (Coursera) May 2024 - July 2024 Aug 2024 - Aug 2024 Programming Fundamentals using Python - Part 1 (Infosys) Google IT Automation with Python Professional Certificate (Coursera) May 2024 - Present Ethical Hacker (Cisco Networking Academy) May 2024 - Present

# **PROJECTS**

# Private Key Encryption and Decryption

**GitHub** 

- Developed AES encryption mechanism with CBC mode in Python using PyCryptodome to securely encrypt and decrypt private keys, ensuring data protection and confidentiality.
- Utilized password-based key derivation by applying SHA-256 to generate a strong 32-byte encryption key from user passwords, enhancing encryption security.
- Applied base 64 encoding and decoding to handle and transmit binary data in a text-friendly format, facilitating efficient data storage and retrieval.

#### Smart Door Lock Using Face Recognition System

- Developed a smart door lock system using facial recognition with Python and OpenCV, gaining practical experience with image processing and model training using the LBPH classifier.
- Designed a Tinkercad simulation to understand the integration of facial recognition technology with Arduino, applying key concepts in a simulated environment.
- Enhanced understanding of security system development and hardware-software interaction through hands-on application and project execution.

## American Sign Language Detection System

GitHub

- Implemented an ASL detection system utilizing Python, Random Forest Classifier, and OpenCV for gesture recognition, and MediaPipe for precise hand tracking, gaining foundational knowledge in computer vision and machine learning.
- Serialized the trained model using Pickle for efficient deployment, deepening understanding of real-time data processing and model deployment techniques.
- Enhanced skills in applying machine learning algorithms to solve real-world problems, focusing on gesture recognition and real-time processing.

## EXTRACURRICULAR ACTIVITIES

## Member of CyberVault, KIIT University

2023 - Present

Cyber Security society of KIIT.

Lead Member of KORUS Individual Dance Crew, KIIT University

2022 - Present

Lead performances and coordinate team activities.

## Active Member of Obstruction Dance Crew, Nepal

2018 - Present

Contribute to choreography and performance planning.